



TESTIMONY BY:

JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

March 22, 2019
10:00 a.m.
State Capitol, Room 423

H.C.R. 220 / H.R. 195
REQUESTING THE ATTORNEY GENERAL TO CONVENE AN AUTONOMOUS
VEHICLE LEGAL PREPARATION TASK FORCE.

House Committee on Transportation

The Department of Transportation (DOT) **supports** H.C.R. 220 and H.R. 195.

This resolution requests the Attorney General to convene a task force to prepare Hawaii for the legal and regulatory implications of transitioning to autonomous vehicles and to submit an interim and final report of its findings and recommendations, including any proposed legislation, to the legislature prior to the convening of the 2020 and 2021 regular sessions, respectively.

The DOT agrees with the task force approach. According to the American Association of Motor Vehicle Administrators' Jurisdictional Guidelines for the Safe Testing and Deployment of Highly Automated Vehicles (HAVs) developed by their Autonomous Vehicle Working Group, "To successfully address the safe integration of HAVs within the transportation system, a collaborative approach should be taken among jurisdictions and stakeholders to gain an understanding of emerging vehicle technologies and the impact to roadway safety, jurisdictional programs, and infrastructure."

Collaboration with various government agencies, stakeholders, and safety advocates will help prepare Hawaii for a safer transition of autonomous vehicles onto our roads.

Thank you for the opportunity to provide testimony.



Email: communications@ulupono.com

HOUSE COMMITTEE ON TRANSPORTATION
Friday, March 22, 2019 — 10:00 a.m. — Room 423

Ulupono Initiative Supports HR 195, Requesting the Attorney General to Convene an Autonomous Vehicle Legal Preparation Task Force

Dear Chair Aquino, Vice Chair Hashimoto, and Members of the Committee:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and better manage waste and fresh water resources. Ulupono believes that self-sufficiency is essential to our future prosperity and will help shape a future where economic progress and mission-focused impact can work hand in hand.

Ulupono supports HR 195, which requests the Attorney General to convene an autonomous vehicle legal preparation task force.

Ulupono requests to become a member of the task force. We have committed to providing \$100,000 as a local match for a successful grant application to assist a group comprising Department of Transportation Services, Department of Transportation, HART, and University of Hawai'i. The group wants to move forward with an autonomous vehicle pilot and a federal grant application due in March 2019. This Legislature will want a high amount of guidance, discussion, and preparation (legal or otherwise) for a technology that will dramatically change the daily life of all of the citizens of Hawai'i.

Through a supportive legal and policy framework, autonomous vehicles (AVs), shared mobility systems, and electric/zero emission vehicles could reduce energy consumption and related emissions by 60 percent over the next 30 years with other benefits in safety and greater access to opportunity for non-drivers.¹ Conversely, a combination of automated vehicles, zero-occupancy vehicles, increased vehicle miles of travel, access for new user groups, and continued reliance on fossil fuels could increase energy consumption

¹ <http://onlinepubs.trb.org/onlinepubs/circulars/ec236.pdf>

and related emissions by up to 200 percent over this same time period.² This technology is moving very quickly, with the 11 largest automakers planning to have fully-autonomous vehicles on highways between now and 2021, and through 2030 for urban use. Hawai'i needs to define what it wants from this new technology to help our community meet its goals and reduce Hawai'i's dependence on imported fossil fuels.

Recognizing this emergent need with our transportation stakeholders, we've outlined a potential roadmap for Hawai'i's AV future. The first is the articulation of what Hawai'i's AV future could be – automated, accessible, connected, electric, and shared (A²CES). The second includes the five strategies that help achieve A²CES – one of which deals with the legalities and regulatory regime for AVs. This means not only implementing the Governor's Executive Order 17 on AVs, but outlining the larger framework for safe operation. This includes compliance with the state motor vehicle code, licensing, driver requirements, insurance challenges, liability concerns, and legal and safe operation. It is important for Hawaii to not let these changes overwhelm us, but rather envision what a future could be with AVs.

As Hawai'i's energy issues become increasingly complex and challenging, we appreciate this committee's efforts to look at policies that support clean ground transportation.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay
Managing Partner

² <http://onlinepubs.trb.org/onlinepubs/circulars/ec236.pdf>



John Uekawa, President
Dave Roll, Executive Director

Hawaii Automobile Dealers Association

HADA testimony in **Strong Support** of
HCR220, HR195
REQUESTING THE ATTORNEY GENERAL TO CONVENE AN AUTONOMOUS
VEHICLE LEGAL PREPARATION TASK FORCE

Submitted to the House Committee on Transportation
for the public hearing 10 a.m. Friday, March 22, 2019
in conference room 423, Hawaii State Capitol

Chair Aquino, Vice Chair Hashimoto and members of the committee:

In college, we used to take a break from finals by playing a game on the front lawn called double-dodge frisbee. Players in a circle would fling frisbees at a player in the center until he was hit and eliminated. Classmate, Roger Wherli, who had panther-like reflexes and seemingly eyes in the back of his head, managed to avoid any frisbee ever thrown at him during my college career.

A driverless car will have reflexes many times faster than the average driver and eyes on all sides with radar-like sensors assisting the vehicle's light-speed-like artificial intelligence computer systems and steering and braking systems.

Insurance companies are estimating that fatalities in a ubiquitous driverless car environment will be reduced to near zero...actually 90% is what some are reporting.

Safety of the public is indeed the driving force that is moving the policies in states that are legislating for driverless car research, and the deployment and testing of such vehicles on their roadways.

Crashes, collisions with pedestrians, and even injuries and fatalities will still occur but the belief is that autonomous vehicles someday will be as safe as air travel is today.

Air travel, of course, also had to evolve.

The legal issues are fairly strait forward until one gets to the trolley problem experiment which involves a machine's programming for impossibly difficult ethical decisions.

So far, in all the millions of miles of driverless car testing, this ethics conundrum has not surfaced.

Again, the issues are fairly straightforward. Was any collision involving an autonomous vehicle, the fault of the accompanying person, the result of a product failure, or perhaps the fault of some other person or thing that occurred outside of the vehicle?

In lieu of any federal legislation, state involvement with this issue will help and the public will be more assured about the testing and deployment of autonomous vehicles if our state has thoroughly examined the issues and crafted policies for the implementation, development and regulation of such vehicles.

Since HADA, as one of the founders of the Hawaii Autonomous Vehicle Institute is involved with the deployment of driverless vehicle technology, we respectfully ask to be part of any task force that is studying the policies regarding the technology.

Thank you for the opportunity to testify on this resolution.

David H. Rolf

For the members of the Hawaii Automobile Dealers Association



SanHi

GOVERNMENT STRATEGIES
A LIMITED LIABILITY LAW PARTNERSHIP

DATE: March 21, 2019

TO: Representative Henry J.C. Aquino
Chair, Committee on Transportation
Submitted Via Capitol Website

FROM: Tiffany Yajima

RE: **HCR 220 / HR 195 – Requesting the Attorney General to Convene an Autonomous Vehicle Legal Preparation Task Force**
Hearing Date: Friday, March 22, 2019 at 10:00 a.m.
Conference Room: 423

Dear Chair Aquino and Members of the Committee on Transportation:

On behalf of the Alliance of Automobile Manufacturers (“Alliance”), we submit these comments on HCR 220 / HR 195.

The Alliance is a trade association of twelve car and light truck manufacturers including BMW Group, Fiat Chrysler Automobiles, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota, Volkswagen Group of North America, and Volvo Car USA.

HCR 220 / HR 195 would request the Attorney General to convene an autonomous vehicle preparation taskforce to prepare for autonomous vehicles by examining existing laws in the U.S. regulating AVs and to report to the legislature on legal and insurance considerations for the regulation of these vehicles in Hawaii.

The Alliance is supportive of the state’s efforts to prepare for autonomous vehicles and suggests broadening the composition of the taskforce to include two or more representatives of the autonomous vehicle industry.

The automotive industry has been steadily evolving vehicle technologies toward a future when cars will be self-driving. As technological advancements are continuing, many companies are also developing vehicles with higher levels of driving automation. Because there are many industry approaches to automation, solving the equation of how to integrate autonomous vehicles in Hawaii requires input from more than just a single representative of the industry that makes and sells these vehicles.

The Alliance is very interested in working with the state on autonomous vehicle integration and would be interested in participating as a member of the working group. Thank you for the opportunity to submit this testimony.